



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/741,653	12/19/2003	William H. Robertson JR.	CE12083JME	3837

7590 01/16/2007
Larry G. Brown
Motorola, Inc.
Law Department
8000 West Sunrise Boulevard
Fort Lauderdale, FL 33322

EXAMINER

PHUONG, DAI

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/741,653

Applicant(s)

ROBERTSON, WILLIAM H.

Examiner

Dai A. Phuong

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-18 is/are allowed.
- 6) ☒ Claim(s) 1-13 and 19-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Reply Appeal Brief

1. In view of the Appeal Brief filed on 11/06/2006, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Response to Amendment

2. Applicant's arguments, filed 11/06/2006, with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Claim 29 had been canceled on 01/31/2006. Claims 1-28 are currently pending.

Claim Objections

3. Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Seto (Pub No: 20050141743).

Regarding claim 1, Seto discloses a latching mechanism for assembly of a housing of an electronic device, comprising:

a latch element 1 (fig. 1, [0022] and [0023]); and

a receiving element 4 contained within the housing 3, wherein the receiving element 4 comprises:

a recess 6 and/or 8 for engaging the latch element 1 (fig. 1, [0022] and [0023]); and

at least one audio port 5 for providing an audio channel for the electronic device (fig. 1, [0022] and [0023]).

Regarding claim 2, Seto disclose all the limitation in claim 1. Further, Seto discloses the latching mechanism further comprising: a gap formed between the latch element and the receiving element, wherein the audio channel further comprises the gap (see fig. 1, [0022] and [0023]).

Regarding claim 19, Seto discloses a method of operating a latching mechanism, comprising the steps of:

mechanically coupling a latch element 1 to a recess 6 and/or 8 of a housing 3, wherein the recess 6 and/or 8 includes at least on audio port 5 (fig. 1, [0022] and [0023]);

creating an audio channel 5 by engaging the latch element 1 within the housing 3, wherein the audio ports 5 are part of the audio channel (fig. 4, col. 3 lines 31-46); and

porting audio through the audio port of the audio channel (fig. 1, [0022] and [0023]).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2617

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-5, 12-13 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seto (Pub No: 20050141743) in view of Steven, III et al. (Pub. No: 20050040192).

Regarding claim 3, Seto disclose all the limitation in claim 1. However, Seto does not disclose the latching mechanism wherein the latch element is rotatably coupled to the recess, and further wherein the latch element rotation includes a first orientation for disengaging the latch element from the housing and a second orientation for engaging the latch element within the housing.

In the same field of endeavor, Steven, III et al. disclose the latching mechanism wherein the latch element is rotatably coupled to the recess, and further wherein the latch element rotation includes a first orientation for disengaging the latch element from the housing and a second orientation for engaging the latch element within the housing ([0017] to [0018]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the earphone Seto by specifically including the latching mechanism wherein the latch element is rotatably coupled to the recess, and further wherein the latch element rotation includes a first orientation for disengaging the latch element from the housing and a second orientation for engaging the latch element within the housing, as taught by Steven, III et al., the motivation being in order to easy installed and remove. Moreover, it prevents to pop off from the device.

Regarding claim 4, the combination of Seto and Steven, III et al. disclose all the limitation in claim 3. Further, Seto discloses the latching mechanism wherein the latch element comprises a protrusion, wherein the recess further comprises a similarly-shaped opening, and further wherein the protrusion aligns with the similarly-shaped opening in the second orientation (see fig. 1, [0022] and [0023]).

Regarding claim 5, the combination of Seto and Steven, III et al. disclose all the limitation in claim 3. Further, Seto discloses the latching mechanism wherein the protrusion misaligns with the similarly-shaped opening in the first orientation ([0017] and [0018]).

Regarding claim 12, Seto disclose all the limitation in claim 1. However, Seto does not disclose the latching mechanism wherein the housing further comprises: a fixed housing portion; and a removable housing portion, wherein the receiving element is contained within the removable housing portion, and further wherein the removable housing portion is assembled to the fixed housing portion when the latch element is engaged within the housing (fig. 4, [0059] to [0065]).

In the same field of endeavor, Steven, III et al. disclose the latching mechanism wherein the housing further comprises: a fixed housing portion; and a removable housing portion, wherein the receiving element is contained within the removable housing portion, and further wherein the removable housing portion is assembled to the fixed housing portion when the latch element is engaged within the housing ([0017] to [0018]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the earphone Seto by specifically including disclose the latching

mechanism wherein the housing further comprises: a fixed housing portion; and a removable housing portion, wherein the receiving element is contained within the removable housing portion, and further wherein the removable housing portion is assembled to the fixed housing portion when the latch element is engaged within the housing, as taught by Steven, III et al., the motivation being in order to easy installed and remove. Moreover, it prevents to pop off from the device.

Regarding claim 13, the combination of Seto and Steven, III et al. disclose all the limitations in claim 1. Further, Steven, III et al. disclose the latching mechanism wherein the electronic device further comprises a keypad, and further wherein the keypad is assembled between the fixed housing portion and the removable housing portion and the removable housing portion when the latch element is engaged within the housing ([0017] and [0018]).

Regarding claim 20, this claim is rejected for the same reason as set forth in claim 2.

Regarding claim 21, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 22, this claim is rejected for the same reason as set forth in claim 13.

Regarding claim 23, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 24, this claim is rejected for the same reason as set forth in claim 3.

8. Claims 6-11 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seto (Pub No: 20050141743) in view of Gammon et al. (Pub. No: 2005/0014537).

Regarding claim 6, Regarding claim 3, Seto disclose all the limitation in claim 1. However, Seto does not disclose the latching mechanism further comprising: a secondary latch

element, wherein at least a portion of the housing is mechanically coupled between the latch element and the secondary latch element, wherein the secondary latch element comprises at least one secondary latch element audio port aligned with the at least one audio port, and further wherein the audio channel further comprises the at least one secondary latch element audio port.

In the same field of endeavor, Gammon et al. disclose the latching mechanism further comprising: a secondary latch element 425, wherein at least a portion of the housing is mechanically coupled between the latch element and the secondary latch element, wherein the secondary latch element comprises at least one secondary latch element audio port aligned with the at least one audio port, and further wherein the audio channel further comprises the at least one secondary latch element audio port (fig. 4 and fig. 5, [0061] and [0063] to [0065]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the communication device of Gattey et al. by specifically including the latching mechanism further comprising: a secondary latch element, wherein at least a portion of the housing is mechanically coupled between the latch element and the secondary latch element, wherein the secondary latch element comprises at least one secondary latch element audio port aligned with the at least one audio port, and further wherein the audio channel further comprises the at least one secondary latch element audio port, as taught by Gammon et al., the motivation being in order to provide mobile terminal including a housing and an electronic circuit positioned in the housing. In addition, it reduces leakage tuning volumes from the earpiece.

Regarding claim 7, the combination of Seto and Gammon et al. disclose all the limitations in claim 6. Further, Gammon et al. disclose the latching mechanism wherein the electronic device further comprises: an audio element, wherein at least a portion of the secondary latch element is mechanically coupled between the audio element and at least a portion of the housing (fig. 4 and fig. 5, [0061] and [0063] to [0065]).

Regarding claim 8, the combination of Seto and Gammon et al. disclose all the limitations in claim 7. Further, Seto discloses the latching mechanism wherein the audio element generates an audio output, and further wherein the audio output is transmitted through the audio channel (fig. 1, [0022] to [0023]).

Regarding claim 9, the combination of Seto and Gammon et al. disclose all the limitations in claim 7. Further, Seto discloses the latching mechanism wherein the audio element receives an audio input through the audio channel (fig. 1, [0022] to [0023]).

Regarding claim 10, the combination of Seto and Gammon et al. disclose all the limitations in claim 6. Further, Gammon et al. disclose the latching mechanism wherein the secondary latch element 425 comprises: an audio plate coupled between the latch element and at least a portion of the housing, wherein the audio plate includes at least one audio plate audio port, wherein the at least one secondary latch element audio port comprises the at least one audio plate audio port (fig. 4 and fig. 5, [0061] and [0063] to [0065]).

Regarding claim 11, the combination of Seto and Gammon et al. disclose all the limitations in claim 10. Further, Gammon et al. disclose the latching mechanism wherein the secondary latch element further comprises: a seal coupled between the audio element and at least

a portion of the housing, wherein the seal includes at least one seal audio port aligned with the at least one audio plate audio port, and wherein the at least one secondary latch element audio port further comprises the at least one seal audio port (fig. 4 and fig. 5, [0061] and [0063] to [0065]).

Regarding claim 25, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 26, this claim is rejected for the same reason as set forth in claim 7.

Regarding claim 27, the combination of Seto and Gammon et al. disclose all the limitations in claim 26. Further, Seto discloses the method of operating a latching mechanism further comprising the steps of: generating an audio output by the audio element; and transmitting the audio output through the audio channel (fig. 1, [0022] and [0023]).

Regarding claim 28, the combination of Seto and Gammon et al. disclose all the limitations in claim 26. Further, Seto discloses the method of operating a latching mechanism further comprising the steps of: receiving an audio input; and transferring the audio input to the audio element through the audio channel (fig. 1, [0022] and [0023]).

Reasons for Allowance

9. The following is an examiner's statement of reasons for allowed:

Claims 14-18 are allowed.

Regarding claim 14, the prior art record does not disclose nor fairly suggest an electronic device, comprising:

a housing, comprising:

a fixed housing portion;

Art Unit: 2617

a removable housing portion having a recess and at least one audio port, wherein the audio port is part of the recess;

a latching mechanism for assembling the removable housing portion to the fixed housing portion, wherein the latch mechanism comprises:

a latch element rotatably coupled to the removable housing portion, wherein the latch element rotation includes an orientation for engaging the latch element to assemble the removable housing portion to the fixed housing portion; and

an audio channel, wherein the audio port is part of the audio channel and the audio channel is formed when the removable housing portion is assembled to the fixed housing portion.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen M Duc can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-7503.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong
AU: 2617
Date: 01-06-2007


DUC M. NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600